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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERIC J. HORVITZ, CARL M. KADIE,
and STUART OZER

Appeal 2007-2470
Application 09/825,820
Technology Center 2600

Decided: March 7, 2008

Before JOSEPH F. RUGGIERO, MAHSHID D. SAADAT,
and SCOTT R. BOALICK, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1-7, 9-18, and 32-34, which are all of the claims pending in this application as claims 8, 19-31, and 35-52 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

Appellants invented a system and method related to information retrieval and processing to provide selected information as a function of a user's previous reviewing habits over different time periods (Spec. 1). Appellants' system and methods are useful in television viewing systems that provide to a user viewing selections that are preferred by the user (Spec. 3). The selection is based on, not only the user's viewing habits, but also the user's viewing habit over particular time intervals (*id.*).

Claim 1, which is representative of the claims on appeal, reads as follows:

1. A system for ranking items in a selectable information list received from an information delivery system, comprising:

a database system that logs selections of information viewed by a user of the information delivery system and logs temporal history related to a plurality of time subintervals that correspond to the viewing of the selected information; and

a collaborative filtering system that employs the logged temporal history and disparate logged temporal history from a plurality of disparate database systems to generate a recommendation specific to the user based at least in part on information obtained from a plurality of users related to a particular one of the plurality of time subintervals.

The Examiner relies on the following prior art references in rejecting the claims on appeal:

| | | |
|---------|--------------------|---------------------------------------|
| Ferman | US 2002/0059584 A1 | May 16, 2002 (filed Mar. 30, 2001) |
| Hopple | US 6,519,769 B1 | Feb. 11, 2003 (filed Nov. 9, 1998) |
| Maissel | US 6,637,029 B1 | Oct. 21, 2003 |

(filed Jun. 10, 1999)

Claims 1, 2, 4, 9-18, and 32-34 stand rejected under 35 U.S.C. § 102(e) as anticipated by Maissel.

Claims 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Maissel and Ferman.

Claims 6 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Maissel and Hopple.

We affirm.

ISSUES

The issues are whether Appellants have shown that the Examiner erred in rejecting the claims under 35 U.S.C. §§ 102(e) and 103(a). The issues specifically turn on whether Maissel anticipates or renders obvious Appellants' claimed invention by disclosing a collaborative filtering system that generates "a recommendation specific to the user" based at least in part on information obtained from a plurality of users, as recited in claims 1 and 18.

FINDINGS OF FACT

The following findings of fact (FF) are relevant to the issues involved in the appeal and are believed to be supported by substantial evidence.

1. Maissel provides for customization of an electronic program guide by an intelligent agent by monitoring viewing behavior of one viewer

or a plurality of viewers and creating a preference profile based on the monitored viewing behavior. The intelligent agent then employs the preference profile to customize the electronic program guide based on the preference profile. (Col. 3, ll. 1-8).

2. As shown in Figure 1 of Maissel, the intelligent agent 130 is operative to store the current program characteristics in a viewer preference profile in the profile storage unit 140. The viewer preference profile typically comprising information obtained over a period of time, on the various current program characteristics of programs viewed by a viewer at various times. (Col. 12, ll. 23-30).

3. The viewer preference profile in Maissel also comprises information on the amount of time or proportion of duration of the program during which each program was viewed by the viewer. (Col. 12, ll. 31-34).

4. Maissel teaches that the viewer preference profile is accumulated over an unlimited amount of time or reset based upon receipt of a signal. (Col. 12, ll. 41-45).

5. Maissel further discloses that, at the headend 340, real-time information on a proportion or percentage of the audience viewing a particular program may be computed. The term “audience”, as used throughout the present specification and claims, refers either to the sum total audience viewing all programs at a particular time, or to the total audience of viewers who are capable of receiving programs at a particular time. (Col. 19, ll. 20-27).

6. Maissel teaches that the real-time information may then be transmitted to subscribers and the display information derived from the transmitted information may then be displayed on the display apparatus 100. (Col. 19, ll. 27-30).

7. The display information disclosed by Maissel may comprise an alert to a user of the display apparatus 100, similar to the alert 105, informing the user that a program on another channel is currently being viewed by a large proportion of the audience and optionally suggesting that the user tune to that program or offering the user a shortcut to quickly tune to that program. (Col. 19, ll. 32-37).

8. Maissel further suggests that various features of the invention which are, for clarity, described in the contexts of separate embodiments may also be provided in combination in a single embodiment, separately, or any suitable subcombination. (Col. 21, l. 65 - col. 22, l. 4).

PRINCIPLES OF LAW

1. Anticipation

A rejection for anticipation requires that the four corners of a single prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation. *See Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1347 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994).

2. *Obviousness*

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See In re Kahn*, 441 F.3d 977, 987-88 (Fed. Cir. 2006), *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991) and *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007).

ANALYSIS

1. 35 U.S.C. § 102 Rejection

Appellants’ position with respect to the teachings of Maissel is that the prior art teaches that alerts based on viewing behavior can be provided to a user wherein alerts based on the general audience behavior can be provided to the user, but a “recommendation specific to the user” based on information from a plurality of users is not generated (Br. 5). Appellants contend that providing an alert based on viewing behavior alone and alerts based on general audience behavior alone is different from the claimed requirement (*id.*).

The Examiner relies on column 19, lines 27-38 of Maissel and responds that since each alert that makes a recommendation to the user is

based on a monitored viewing behavior of a particular user, the generated recommendation is specific to the user (Ans. 12). The Examiner further argues that Maissel provides for a combination of various disclosed alerts in a single embodiment such that alerts based on the viewing behavior and general audience behavior may be generated (Ans. 13).

Considering the arguments presented by Appellants and the Examiner in view of the prior art teachings, we agree with the Examiner that the alerts generated in Maissel read on the subject matter recited in claim 1. Maissel describes monitoring the viewing behavior of one or a plurality of viewers (FF 1). Maissel uses the viewing profile to generate alarms or recommendations for a user according to the user's profile and based on the viewing information related to the sum total audience (FF 5-7). Therefore, contrary to Appellants' arguments that the alerts Maissel generates are either for a user or general audience (Br. 5), the reference suggests that both may be combined in a single embodiment (FF 8).

Appellants further argue that Maissel does not teach or suggest the claimed "logged temporal history and disparate logged temporal history" and "log temporal history related to a plurality of time subintervals" (Br. 5-7). The Examiner responds that the viewing information obtained over a period of time and at various times in Maissel is the same as the claimed "logged temporal history related to a plurality of time subintervals" (Ans. 13-14).

Upon further review of Maissel, we remain convinced by the Examiner that the specific log time and intervals taught in Maissel provide

the temporal history related to different durations or specific time subintervals. In that regard, forming Maissel's viewer profile includes storing the time and information related to the program viewed by the user as a temporal history based on the duration of the viewing (FF 2). Maissel further provides for the viewed information history as the time and the duration of the viewing which is obtained and accumulated over time related to different times or subintervals a program is viewed by the user (FF 3-4).

In view of the analysis above, we find that Maissel teaches all the recited features and prima facie anticipates independent claim 1, as well as independent claim 18 which is not argued separately. Additionally, Appellants do not argue claims 2, 4, 9-17, and 32-34 separately from their base claims and thus allow these claims to fall with independent claims 1 and 18 (Br. 7).

2. 35 U.S.C. § 103 Rejection

Regarding the rejection of the remaining claims, Appellants rely on the same arguments discussed above with respect to claim 1 and merely assert that neither Ferman, nor Hopple cures the deficiencies of Maissel. Accordingly, as Appellants fail to point to any error in the Examiner's position with sufficient particularity, we remain unconvinced by Appellants' arguments that the Examiner erred in rejecting claims 3 and 5-7 under 35 U.S.C. § 103.

CONCLUSION

On the record before us, Appellants have failed to show that the Examiner has erred in rejecting the claims or the rejection is not supported by a legally sufficient basis for holding that Maissel anticipated or rendered obvious the claimed subject matter. In view of our analysis above, we sustain the 35 U.S.C. § 102 rejection of claims 1, 2, 4, 9-18, and 32-34 over Maissel, and the 35 U.S.C. § 103 rejection of claims 3 and 5 over Maissel and Ferman and of claims 6 and 7 over Maissel and Hopple.

DECISION

The decision of the Examiner rejecting claims 1, 2, 4, 9-18, and 32-34 under 35 U.S.C. § 102 and rejecting claims 3 and 5-7 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

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